Nutrition And WIC Update

January 2003 Nutrition and WIC Services

Heaping Helpings Encourage Overeating

Pat Dunavan, Nutrition Education Specialist

Parents who avoid piling oversized portions on children's plates could be helping their pint-size diners avoid super-sized appetites and whopper waistlines. A recent study by the Children's Nutrition Research Center in Houston Texas found that portion size can affect how much some children eat.

Preschoolers in the study ate an average of 25 percent more macaroni and cheese when lunchtime servings were doubled. Since eating more macaroni and cheese did not curb the youngsters' appetites for other foods, researchers found that the average lunchtime calorie counts jumped 15 percent on days when the entree was super-sized.

Study researchers point out that the power of large portions to encourage overeating among young children is a warning flag. Not only do today's families eat out and take-out more often than in the past, but restaurant, beverage and snack foods portions keep getting bigger.

Not all children in the study responded in the same way when served heaping helpings. While some ate as much as 60 to 80 percent more when portions were super-sized, others ate about the same amount regardless of the portion size served. Researchers do not know why some children appeared to be more susceptible to large portions than others, but those children who were most responsive to large portions were also those who consumed the greatest amount of snack foods in the absence of hunger during the study. Overeaters also tended to consume their extra calories, not by eating faster, but by taking bigger bites.

Researchers feel that the study findings suggest a link between an increased susceptibility to external eating cues like super-sized portions and a diminished ability to recognize or respond to internal satiety cues. Interestingly enough, the study also found that large portions seemed to lose the power to promote overeating when children were allowed to serve themselves. When the super-sized entrees were in serving bowls instead of piled on children's plates, the amount the child served themselves and ate mirrored the amount they typically consumed on days when "single-size" servings were provided. Simple mealtime strategies like encouraging "small bites" and serving family-style meals can help children avoid the temptation to overeat. To learn more about raising a healthy eater, see the resource list at: http://www.bmc.tmc.edu/cnrc/healthyeating.html.

Herbal Use By Infants and Children in the Special Supplemental Nutrition Programs for Women, Infants, and Children in Wisconsin and Kansas

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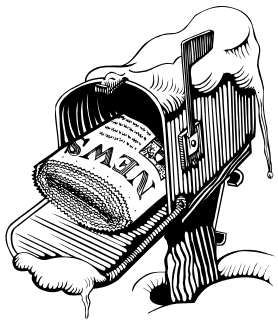
The following is an abstract about the study in which many of our local agencies participated. The study has been accepted by the American Dietetic Association for publication in its journal.

Learning Outcome:

Describe herbal usage patterns of youth from families participating in Wisconsin (WI) and Kansas (KS) Special Supplemental Nutrition Programs for Women, Infants, and Children (WIC).

Abstract Text:

Herbal use precautions urge limited administration to infants and children. To examine herbal use in this population, researchers randomly selected 38 WIC projects in WI and KS (37 % of total projects) after stratifying for ethnicity and population density. Using expert input and pilot testing, a caregiver checklist survey was developed in English and Spanish. Sealed drop box collection procedures ensured blinding of personnel to caregiver responses. State and university human subjects review boards approved the study. Surveys returned by 2562 WIC participants in WI and KS (response rate= 59.6 %) indicated youth herbal use on 35.6 % of the surveys (639 in English, 274 in Spanish), representing 1360 children; 292 (21.5%) consumed herbs without concomitant caregiver use. Caregivers denoting youth herbal use were similar in ethnicity and age (mean 27.8 years ± 8.9) to those not providing herbal care. Youth herb use was associated with a college-educated caregiver (Chi Sq. 12.9, $p<.0001$). On average, 1.94 herbs were used per youth (maximum=16). Over 75% of surveys indicated two or fewer herb doses. Most frequently checked herbs (% of surveys denoting herbal use) were Aloe vera (43.6%), Manzanilla (36 %), garlic (22 %), peppermint (17 %), chamomile (14 %), lavender (10%), cranberry (9 %), ginger (7 %), and Echinacea sp (6 %). The herbal formulary was diverse with 67 different herbs checked; mean herb type noted per survey was two (maximum=16). Ethnospecific herbal use was evident. Caregivers used an average of 1.83 sources for information (range 0 to 13); 89% reported using three or less. Most frequently cited sources were family (67.7%) and friends (27.9%). Findings demonstrate considerable herbal use among WIC infants and children and advocate the need for inclusion of herbal education in WIC.



Local Agency News

We say goodbye to these employees:

Butler County: Stephanie Cundit, RD
Douglas County: Shana Morris, Office Assistant
Southwest Kansas WIC: Lisa Padilla, Clerk
Southwest Kansas WIC: Marisela Ruiz, Clerk
Wyandotte County: Mandy Gaskin, RD, Breastfeeding Coordinator

We welcome these people to the WIC family:

Douglas County: Shawn Hastie, Office Assistant
Harvey County: Doris Mitchell, RN, WIC Coordinator
Jefferson County: Eileen Bochsler, RD
Leavenworth County: Karen From, RD, WIC Coordinator

Sedgwick County: Tara Swisher, Office Specialist
Sedgwick County: Michelle Cardona, Office Specialist
Sedgwick County: Elaine Tallman, Office Specialist
Sedgwick County: Jacki Hurd, CMA
Southwest Kansas WIC: Celia Moncada, Clerk
Southwest Kansas WIC: Monica Roman, Clerk
Wyandotte County: Jessica Smith, Clerk
Wyandotte County: Elizabeth Wells, RD

Congratulations go to Kathy Walker, RN, IBCLC, from Reno County on recently receiving her credentials as a certified lactation consultant. Way to go, Kathy!

Check This Out!

Pat Dunavan, Nutrition Education Specialist

Want to take a quiz on food labels? Then try FDA's web site at http://www.cfsan.fda.gov/~dms/flquiz1.html It provides information on serving sizes, Daily Values and more. Test your understanding today.

The USDA has updated its publication on the nutritive values for common household foods known as the Home and Garden Bulletin 72. You may order copies from their web site or download a copy by simply going to: http://www.nal.usda.gov/fnic/foodcomp.

Want to update your skills in measuring infants and children. Are you plotting the growth charts correctly? Then check out http://depts.washington.edu/growth/ . These interactive teaching modules can provide just the in-house training you require.

If you have Vietnamese clients who can read Vietnamese, you may want to download the breastfeeding education materials available through the University of California at Berkeley at http://nutrition.berkeley.edu/extension/vietnamese.html .

Ready to make a recipe and find that you don't have an ingredient? Then check http://www.ext.nodak.edu/extpubs/yf/foods/he198w.htm They have a listing of substitutions from Allspice to Yogurt.

www.nncc.org/Nutrition/nutr.page.html, a web site from the National Network for Child Care is an excellent source for up-to-date information on child and infant nutrition. It addresses topics such as breastfeeding, meals, snacks, and food safety. Spanish materials are included.

Abreast of the News

Mary Washburn, State Breastfeeding Coordinator

"That same dad was in my class again last night", I used to complain. He sits with his arms folded and a look on his face that says he doesn't want to be there. "Does the same dad come every month to your breastfeeding class?" colleagues would ask. It wasn't the same dad, of course. However, there was always one person who didn't seem to like what they were hearing. Similar situations also occur in breastfeeding classes for health professionals.

Attending a class doesn't necessarily mean that everyone in the room is comfortable with the idea of breastfeeding. Some are undecided. Others come only because their partner insisted or the job required it.

There are ways to put people at ease and provide opportunities to express negative or positive feelings about breastfeeding. One technique that works well without embarrassing or focusing attention on the individual is to ask the class to vote on statements about breastfeeding. They hold up cards–red for "no", green for "yes", and yellow for "unsure" to indicate their vote. The teacher must plan the statements carefully and know the facts behind each statement.

This activity shows the class that others share their questions and doubts. They learn that the teacher can be trusted to give accurate, objective information. Even the most uncomfortable dad or reluctant health professional will usually relax after this exercise and be ready to hear what the instructor has to say.

SAMPLE STATEMENTS

"Babies who exclusively breastfeed for 3 months, have 50% fewer ear infections."
This fact is supported by research studies.

"Breastfeeding protects against childhood cancer."
The research is incomplete and applies only to certain types of cancer.

"You have to exclusively breastfeed or not do it at all."
While exclusive breastfeeding provides the best protection from illness and the best nutrition, any amount of breastfeeding is beneficial.

By Martha S Hall RN, MSN, IBCLC, from Arkansas Breastfeeding and WIC Program Update, Summer 2002, Volume 14

Give the Gift of Reading

Pat Dunavan, Nutrition Education Specialist

Want to make clinic go easier and encourage children and families to read together? Then consider this event successfully done by one New Jersey WIC clinic. Working with their local elementary school, they sponsored a "Have A Heart, Donate A Book" campaign. They collected over 2,000 books which were separated into different age categories. The books were distributed by the WIC staff after finishing the finger stick during certification. Each child chose a book for their own. Staff reported that you could often walk through the waiting room and see children "reading" their new books. The rest of the certification process went more smoothly according to parents and WIC staff. Those with older siblings were given the more difficult books to take home to them. What a wonderful way to spread the word about WIC and share the gift of reading with our families!

New in Nutrition: Acceptable Macronutrient Distribution Ranges

Patrice Thomsen, MS, RD, LD

In September, 2002, the Food and Nutrition Board of the Institute of Medicine, The National Academies, released their report presenting Dietary Reference Intakes (DRIs) for energy and the macronutrients, carbohydrate, fiber, fat, fatty acids, cholesterol, protein and amino acids. Acceptable Macronutrient Distribution Ranges (AMDRs) were set for fat, carbohydrate, protein, and n-6 and n-3 polyunsaturated fatty acids. Let's examine how these new ranges compare to older recommendations related to fat, protein, and carbohydrate intake.

For years, many of us in the nutrition field have been familiar with the general recommendations to consume:
- no more than 30% of calories from fat, with no more than 10 % from saturated fatty acids
- 10-15 % of calories from protein, and
- the remainder from carbohydrates, with no more than 10% of calories from simple sugar.

The new recommendations are listed in the table. The AMDR is expressed as a percentage of total energy intake because its requirement is not *independent* of other energy sources or of the total energy need of the individual. If an individual consumes below or above this range, there is a potential for increasing the risk of chronic diseases shown to affect long-term health, as well as increasing the risk of insufficient intakes of essential nutrients.

Acceptable Macronutrient Distribution Ranges (AMDRs)

	Range (percent of energy)		
Macronutrient	Children, 1-3 y	Children, 4-18 y	Adults
Fat	30-40	25-35	20-35
Carbohydrate	45-65	45-65	45-65
Protein	5-20	10-30	10-35

The AMDR for total fat is limited to no less than 20% for adults to prevent the fall in HDL-cholesterol associated with very low fat diets. Similarly, the AMDR for carbohydrate is limited to no less than 45% in order to prevent high intakes of fat. Given potential concerns related to adequate intakes of other nutrients, the upper value for protein is set at 35% of energy for adults. The lower protein limit (10%) approximates the amount needed to meet the Recommended Dietary Allowance. Saturated fatty acids, trans fatty acids, and cholesterol all are related to heart disease risk, but can not realistically be eliminated. Thus the recommendation is to have as low an intake as possible for these three lipids while consuming a diet that is adequate in other nutrients.

Some people are surprised at the 35% allowance for fat. Risk for chronic disease is more related to intake of saturated fatty acids than total fat. Therefore, if one limits saturated and trans fatty acids, the remainder (mono- and polyunsaturated fatty acids) can total a higher level without increased risk.

Notice the fat recommendations for children. Some experts encouraged a low-fat diet for children, while others encouraged moderation. The Kansas WIC Program always has followed this more moderate approach, especially for younger children. The moderate approach is reaffirmed in the new recommendations.

Increasing intakes of added sugars may be associated with a decline in consumption of certain vitamins and minerals. While such trends exist, it is not possible to determine a specific sugar intake level that would lead to an inadequate intake of vitamins and minerals. Based on available data, a maximal intake level of 25% or less of energy from added sugars is suggested. The report goes on to point out that total sugar intake can be lowered by eating mostly sugars that are naturally occurring and present in nutrient-dense foods like fruit and dairy products, while limiting fruitades, soft drinks, and candies.

Based on "chatter" from various list-serve sources, it seems as if there is considerable surprise from nutrition educators about the new "suggested maximal intake level for added sugars". As WIC staff, we need to remember that it is "no more than 25% of calories" does not mean than 25% is an okay level for everyone. It is very easy for tiny tummies to fill up on high sugar, low nutrient foods. Likewise those of us with big tummies!

References:

Food and Nutrition Board, Institute of Medicine. *Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids.* (2002). This report may be accessed via www.nap.edu

Trumbo, P., Schlicker, S, Yates, A, & Poos, M. (2002) Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids. *Journal of the American Dietetic Association, 102*, 1621-1630.

Physical Activity Guidelines for Infants and Children

Confining babies and young children to strollers, play pens, car and infant seats for hours at a time, may delay development such as rolling over, crawling, walking and even cognitive development. Such restrictions can begin the path to sedentary preferences and childhood obesity according th the National Association for Sport and Physical Education (NASPE). The Association has developed a series of physical activity guidelines for infants and children to encourage parents, teachers, and caregivers to enhance the skills of young children.

Infants should be encouraged to be physically active from the beginning of life. That is among the recommendations of the first physical activity guidelines specifically designed to meet the developmental needs of infants, toddlers and preschoolers.

Guidelines for Infants

There are five guidelines for each age group. Part of the infant's day should be spent with a caregiver or parent who provides opportunities for planned physical activity. These experiences should incorporate a variety of baby games such as peekaboo and pat-a-cake and sessions in which the child is held, rocked, and carried to new experiences.

Guideline 1: Infants should interact with parents and caregivers in daily physical activities that are dedicated to promoting the exploration of their environment.
Guideline 2: Infants should be placed in safe settings that facilitate physical activity and do not restrict movement for prolonged periods of time.
Guideline 3: Infants' physical activity should promote the development of movement skills.
Guideline 4: Infants should have an environment that meets or exceeds recommended safety standards for performing large muscle activities.
Guideline 5: Individuals responsible for the well-being of infants should be aware of the importance of physical activity and facilitate the child's movement skills.

Guidelines for Toddlers and Preschoolers

For toddlers, basic movement skills such as running, jumping, throwing, and kicking do not just appear because a child grows older, but comes from experience. For instance, a child who does not have access to stairs may be delayed in stair climbing and a child who is discouraged from bouncing and chasing balls may lag in hand-eye coordination.
Guideline 1: Toddlers should accumulate at least 30 minutes daily of structured physical activity; preschoolers at least 60 minutes.
Guideline 2: Toddlers and preschoolers should engage in at least 60 minutes and up to several hours per day of daily, unstructured physical activity and should not be sedentary for more than 60 minutes at a time except when sleeping.
Guideline 3: Toddlers should develop movement skills that are building blocks for more complex movement tasks; preschoolers should develop competence in movement skills that are building blocks for more complex movement tasks.
Guideline 4: Toddlers and preschoolers should have indoor and outdoor areas that meet or exceed recommended safety standards for performing large muscle activities.
Guideline 5: Individuals responsible for the well-being of toddlers and preschoolers should be aware of the importance of physical activity and facilitate the child's movement skills.

During the preschool years, children should be encouraged to practice movement skills in a variety of activities and settings.

Copies of the full document are available by calling 1-800-321-0789. The cost is $10 for NASPE/AAHPERD members and $13 for non-members.

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